



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/782,845      | 02/23/2004  | Yu-Nan Pao           | LOU 115             | 5516             |

7590 07/13/2005

RABIN & BERDO, P.C.  
Suite 500  
1101 14th Street  
Washington, DC 20005

EXAMINER

SEMBER, THOMAS M

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2875

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                  |              |  |
|------------------------------|------------------|--------------|--|
| <b>Office Action Summary</b> | Application No.  | Applicant(s) |  |
|                              | 10/782,845       | PAO ET AL    |  |
|                              | Examiner         | Art Unit     |  |
|                              | Thomas M. Sember | 2875         |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/23/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Dilouya. Dilouya (see particular figure 4) discloses an apparatus for homogeneously distributing lights, comprising: a light guide plate 20; an incidence microstructure 23' being arranged on a surface of the light guide plate and opposite to a light source; and an emergence microstructure 24', the emergence microstructure being arranged on a surface of the light guide plate opposite to the incidence microstructure; wherein the lights emitted by the light source pass through said apparatus thereby being homogeneously distributed. Regarding claim 2, the incidence microstructure is a continuous structure or a discontinuous structure having a triangle cross-section and longitudinally arranged along the light source. Regarding claim 3, the emergence microstructure is a continuous structure or a discontinuous structure having a triangle cross-section and longitudinally arranged along the light source. Regarding claim 4, the emergence

microstructure is a micro lens array structure. Regarding claim 5, the micro lens array structure is a structure selected from 'the groups consisting of honeycombed structure, circular dot structure and irregular structure (as broadly claimed, prisms 24' are irregular surfaces). Regarding claim 6, the light source is a plurality of lamps (35a-c).

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Borchardt. Borchardt discloses an apparatus for homogeneously distributing lights, comprising: a light guide plate (20-22); an incidence (light is projected through cavity 25 and is incident on prisms 22) microstructure 22 being arranged on a surface of the light guide plate and opposite to a light source; and an emergence microstructure 20, the emergence microstructure being arranged on a surface of the light guide plate opposite to the incidence microstructure; wherein the lights emitted by the light source pass through said apparatus thereby being homogeneously distributed. Regarding claim 2, the incidence microstructure is a continuous structure or a discontinuous structure having a triangle cross-section and longitudinally arranged along the light source. Regarding claim 3, the emergence microstructure is a continuous structure or a discontinuous structure having a triangle cross-section and longitudinally arranged

Art Unit: 2875

along the light source. Regarding claim 4, the emergence microstructure is a micro lens array structure. Regarding claim 5, the micro lens array structure is a structure selected from 'the groups consisting of honeycombed structure, circular dot structure and irregular structure (as broadly claimed, prisms 20 are irregular surfaces).

Regarding claim 6, the light source is a plurality of lamps 14. Regarding claim 7, the light guide plate is made of one of a light transmitting polymer material and a semi light transmitting polymer. Regarding claim 8, the apparatus is applied to a backlight module of an LCD panel 12.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Adachi et al, Marvin et al and Lee '249 discloses lighting devices similar to applicant's invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Sember whose telephone number is 571-272-2381. The examiner can normally be reached on M-F 8 A.M- 5.30 p.m. first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas M Sember  
Primary Examiner  
Art Unit 2875

\*\*\*